Critical Thinking and Social Media: An Argument for Learning Communities

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While information and communication technologies (ICT) transform the world of work and leisure, largely for the better, the question is whether these developments are changing how we consume information? Communications technology can connect but also distance people. The affordances of ICTs manifest themselves in very different ways that can constructively connect or limit exposure. This is becoming ever more evident with social media. Social media in the form of spontaneous and superficial messages do not purposefully encourage depth of thought and civil discourse. Moreover, social media encourages ideological cocooning (living within a set of beliefs without challenge) as much as it connects us. The reality is that those who use social media too often connect only to the like-minded and are more reluctant to express dissenting views. Social media is what it says – social. It is not called "thoughtful media" for good reason.

As a result social media is changing how we think and learn. Technology has increased the opportunity and quantity of communication but there is growing concern about the quality of our exchanges. While the dissemination of information has increased exponentially, the ability and willingness to critically assimilate that information does not appear to have kept pace. Too often, what we see are people retreating to their silos that serve as echo chambers in terms of reinforcing existing beliefs and biases. Worse yet the conversations exhibit fact-free inquiries. As a result it is becoming exceedingly difficult to shift peoples' opinions and perspectives.

In this regard we are all familiar with the phrase "fake news." If you watch the main stream news you are confronted with charges of fake news. Interestingly, fake news is not news, it is false information or worse yet carefully constructed lies. Fact free ideology is serious as it challenges our democracy. For this reason it is essential that we appreciate the risks of disinformation in the media, especially with regard to social media. This leads us to ask, has disinformation in social media become the new normal? Does the quest for entertainment and acceptance undermine factual reality? Do social media have a broken relationship with facts and the truth? If so, how do we encourage and develop critical thinkers?

One thing I do know is that it is not sufficient to simply denounce fake news. We must prepare individuals to be more skeptical and critical. Individuals must develop what Ernest Hemmingway called a good BS detector and be open to alternative perspectives and evidence. The argument here is that critical thinking is best nurtured by collaborative, transactional approaches. In this regard, technology has greatly expanded the possibilities for connectivity and sustainable communities of inquiry. The challenge is to design communities that focus on communication that will stimulate and sustain reflection and discourse. Making sense of information and identifying misinformation requires reasoned judgment and more than self-reflection. Meaning and truth must be put to the test and that can only be done when ideas can be challenged.

Thinking Collaboratively

When people are selecting their own facts unchallenged, critical thinkers will be hard to find. So how do we get people to be more skeptical about what they read; to challenge assumptions and ideas? Thinking collaboratively is a process for overcoming confirmation bias. The fact is that most of us "generally like to avoid personally disquieting information" (Nickerson, 1998). A core reason for learning collaboratively is that humans are inherently selective in seeing and reinforcing existing beliefs (confirmation bias). We

must break out of this cognitive straightjacket if we are to consider new ideas and to overcome the human bias to confirm and not question our deeply held perspectives and beliefs. This reluctance to explore conflicting arguments or ideas is well known in science (Kuhn, 1962). If confirmation bias is true for those committed to the rigor of the scientific method, then there is clearly a need to address this predisposition generally.

Sadly we are seeing a growth of believing what we want to believe and rejecting alternative views and arguments. Communication is being restricted by extreme positions. Controversial invited speakers on campuses are being shouted down and denied the right to speak. Entrenched views and political correctness is seriously challenging critical thinking. Discourse is undermined when ideas that you disagree with or find uncomfortable are denied expression and exploration. In this way controversial ideas are never open to debate, truth is obscured and we enter very dangerous authoritarian territory. Critical discourse is a rigorous form of critical thinking that includes being challenged. As such discourse is more than interaction and dialogue. While critical discourse is not easily created and managed, collaboration is an inherent human characteristic and central to human intelligence and evolution.

Human instinct may be biased to collaboration, we must be conscious of the pressure to conform and engage in group think; to avoid what my colleague Walter Archer termed "pathological politeness." This raises the challenges of accessing information from social media. On social media the risk is a "collective social bubble" where like-minded individuals are insulated from contrary opinions and diversity of thought. They become trapped in their ideological bubble and become isolated in a tribal echo chamber. Connectivity is insufficient to encourage critical and creative thinking. Collaborative inquiry on the other hand is a search for truth while being vigilant to the degradation of fact. As we have seen in the recent US election and the influence of fake news, there is a pressing need to develop a good BS detector. We have to have the ability to think critically when flooded with questionable information presented as facts. We must learn to recognize opinion as opposed to information based on data and rational argument.

The charge of fake news and denial of conflicting views is a serious issue in terms of critical thinking. The inherent tendency or bias to reinforce what we already believe and reject the consideration of alternative perspectives speaks to the core strength and a reason for a community of inquiry approach. Confirmation bias is a submission to conform to the group in a way that is a barrier to seeking the "best version of the truth." There is great risk for conformity in thinking and learning that is too strongly attached to the position of a group (group think). This is obviously relevant in the current environment of fake news and where individuals are increasingly trapped in their selected bubble. I explored this issue of conformity in my book titled Thinking Collaboratively (Garrison, 2016). The central theme of this book was the idea of confirmation bias that addressed the human tendency to confirm previously held ideas and a resistance to consider alternative perspectives. I argued that paradoxically, thinking is not an individual private experience. Thinking and learning without critical feedback and diagnosis of misconceptions is to confirm existing beliefs. The constructive alternative is to recognize our fallibility when it comes to understanding complex subjects and situations and thereby avoid the cognitive straightjacket of confirmation bias. Instead we must shift to evidence based discourse and open inquiry. I argue that this can only be realized through collaborative approaches to thinking and learning; in a cohesive group of learners who purposely and openly explore, examine and challenge beliefs and ideas.

Personal History

Bringing people together to think and learn collaboratively through critical reflection and discourse has been the core theme of my research. Before I address this more specifically, however, let me provide

some context to how my thinking evolved regarding collaboration. When I studied psychology as an undergraduate the focus was on individual cognition. On the other hand, my course on social psychology largely ignored individual cognition. At the time there was a clear divide and my interest went to individual thinking and learning. This carried forward when I did a Masters in computer applications in education – at a time I might add before the introduction of the microcomputer. The reality was that there were not enough terminals for each student. So inevitably we paired students at a terminal by necessity. As a result I began to see the advantages of students working collaboratively. This stayed with me and when I was doing my doctorate in adult education years later I was formally introduced to collaborative approaches to learning and it all started to come together for me.

I began to question how constructs such as critical thinking and self-directed learning could be incorporated into collaborative approaches to learning. As a result I developed a model of critical thinking and SDL that included collaboration. This work eventually formed the core of the Community of Inquiry (CoI) framework. The catalysts for the CoI framework were developments in computer conferencing, the Internet, and the challenge of designing an online graduate program. That said it must be emphasized that the CoI framework is based on constructs and research in face-to-face higher education. This fact means it is a generic framework and is not restricted to online learning.

The enhanced opportunities for engagement in a connected society raise important questions about the role the environment plays in stimulating and shaping thinking and learning. While there has always been pressure to conform to the beliefs of others due to attachment and identification with the group, there remains great potential for critical discourse. So the question is how to create and manage thinking and learning collaboratively that develops critical thinking and metacognitive awareness?

The Community of Inquiry

Thinking collaboratively encourages individuals to engage deeply and think about their thinking. This is the enormous strength of a learning community that exhibits curiosity and criticality. The ability to collaborate is linked to the origin of human intelligence and evolution. As the recognized biologist E. O. Wilson states, "...the primary and crucial difference between human cognition and that of other animal species ... is the ability to collaborate for the purpose of achieving shared goals and intentions" (Wilson 2012, p. 226). This advantage is operationalized through communication within the group. Open communication, however, in a learning community is distinctly different. A learning community focused on inquiry represents another dimension beyond simply connecting individuals. Both individual certainty and group pressure to conform are major barriers to thinking collaboratively. Thinking collaboratively in a community of inquiry provides the balanced tension between individual thoughts and input from the group. Thinking collaboratively is the dialectic push and pull of the personal, interpretive realities of the individual and the shared world. Communities provide the means to integrate the personal and shared worlds and cohesively engage participants in critical discourse.

We are more effective operating as a group. Thinking and learning is more than sharing information; it is engaging purposely and collaboratively in critical thinking and discourse. Critical thinking is not a private experience. Shared thinking helps us to make sense of experiences while opening our thoughts and beliefs to examination and testing. Moreover, from a pragmatic perspective, thinking collaboratively is more consistent with flourishing in a highly connected knowledge society. We must not underestimate the importance of social connections in thinking and learning. This is the essence of a community of inquiry.

The Col framework is strongly embedded in the learning sciences and is a direct contribution to understanding thinking and learning in a connected knowledge society. Technology can bring people together but it does not necessarily mean more meaningful thinking and discourse. Our research into the learning sciences reveals that deep conceptual understanding is best achieved by focusing on the active participation of learners in creative and engaged environments where they can reflectively express and test their state of knowledge (Sawyer 2006). A community of inquiry is a process of questioning and challenging ideas and that constructively contributes to understanding and resolving important questions. This requires a skeptical but respectful approach where challenging the validity of ideas is not a personal affront.

The core dynamic of the Col framework is grounded in Dewey's method of practical inquiry. Practical inquiry is simply an everyday means of thinking and learning that models the scientific method. It demonstrates how thinking is distributed across groups of learners. Dewey viewed thinking and learning from the process of inquiry where ideas emerge and are put to the test. That is ideas are advanced when they are shared and exposed to alternative explanations. It is through collaborative inquiry that facilitates critical reflection and discourse. While collaboration can provide the environment for questioning, there has to be facilitation and direction that can overcome allegiance to the tribe and a potential unwillingness to think critically. Practical inquiry encourages the fusion of independent thought and shared meaning.

Community displays the characteristics of common purpose, interdependence, collaboration, communication, and trust. A community of inquiry provides the conditions for participants to exchange ideas, sustain discourse, collaboratively construct meaning, and validate knowledge. The CoI framework is a process model that focuses on open communication where participants learn metacognitively as much about the process of inquiry as they do about the content being studied. The overarching goal of a community of inquiry has been described "as constructing another level of awareness—the metacognitive" (Kennedy & Kennedy 2010). A community of inquiry invites a metacognitive consideration of how we think and learn collaboratively. Without such awareness a community of inquiry does not effectively exist and deep and meaningful approaches to thinking and learning are at risk.

A community of inquiry can be effective in combating polarized thinking. Critical thinking has long been recognized as an important educational goal but has too often been conceived and operationalized as an individual attitude and ability. Recently, however, a more relevant and complete cognitive construct is emerging. That is the necessity to think and learn through collaborative processes that provide a means to inquire, test and apply new understandings. It is argued here that thinking collaboratively is essential to flourish in a highly connected world where information must be addressed with skepticism. The approach must be to resolve issues through evidence based discourse. Only through the process of diagnosing misconceptions and considering alternative conceptions are we able to achieve any confidence in our understanding. Critical thinking increasingly demands that we be engaged in purposeful groups of learners. Constructing personal meaning without critical feedback is largely delusional thinking.

As has been noted, human tendency is to reinforce existing beliefs and resist disquieting ideas. Collaborative inquiry is crucial to challenge questionable intuitive responses and encourage diversity of thought in our quest for shared understanding and knowledge. Discourse cannot be in an echo chamber. Discourse must occur in diverse communities where alternate viewpoints are explored. A community of

inquiry, or our best version of this, is the way to indemnify ourselves with regard to the perils of social media and fake news

Leadership

The complexity of designing and delivering a community of inquiry that supports thinking critically demands more than recipes or a short list of best practices. This necessitates that we have the benefit of a coherent theoretical framework that provides the order and rationale to manage the complexity of personal reflection and collaborative discourse. At the core of creating and managing such a community of learners is *shared leadership* that can ensure constructive progression of the learning experience while adjusting to shifting interests and challenges.

The unpredictability of inquiry necessitates that discourse be allowed to explore new ideas and paths of interest. These strategic decisions reflect the importance of leadership in a community of learners. Leadership judgments are crucial to ensure that intended goals remain in focus, while leaving open opportunities to constructively digress to explore relevant perspectives and ideas. However, in a community of inquiry this should not be delegated to one person but distributed across the group as participants grow in confidence and ability. To develop critical thinking and metacognitive awareness necessitates that participants take increasing responsibility and control of the transaction. The teacher of record slowly diffuses into the group.

In this disruptive age of communication "... more and more, people are beginning to view leadership as a way of working with others in a group rather than a set of personality traits that an individual needs to gain a position of authority" (Allen 2004). Collaborative leadership provides the environment and process where "authority and freedom are in organic union" (Martinez-Aleman 2012, p. 110) – a union where thinking and leading collaboratively can flourish. Practically speaking, in an educational context, the instructor "attempts both to exert and not exert control, and teaches by not teaching" (Kennedy and Kennedy, 2010). Collaborative leadership in thinking and learning must be a shared responsibility based on diverse perspectives and ideas that can be reasonably challenged. This reflects the importance and challenge of leadership in a functional community of inquiry.

Conclusion

Technology does not replace a purposeful and collaborative learning experience. Being able to operate a smart phone and staying connected through Twitter says little about critical thinking, knowledge construction or innovative thinking. Technology can create a shared space but it does not shape the quality of the thinking and learning transaction. Sadly, it appears that social media too often rewards limited attention and superficial reactions. The very architecture of social media restricts meaningful discourse. More dangerously it encourages people to become more entrenched in their silos which reinforce ideological thinking and willful ignorance.

On the other hand, technology has the potential to unbundle time and space where discourse can be sustained over time. Exchanges can be read, re-read and revised based on evidence and feedback. The asynchronous nature of ICTs can provide the opportunity to reflect and engage in sustained discourse with the expectation of mitigating the insidious presence of fake news. However, perhaps the greatest barrier to critical thinking in a fast paced information society is to take the time to critically explore new ideas. This requires a conscious commitment to thinking and learning. In this regard perhaps we need to first develop a predisposition for skepticism and a willingness to take the time to assess the credibility of (dis)information. I argue that this is best done in a learning community.

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